

5.8 10th Street and N Street

BEFORE

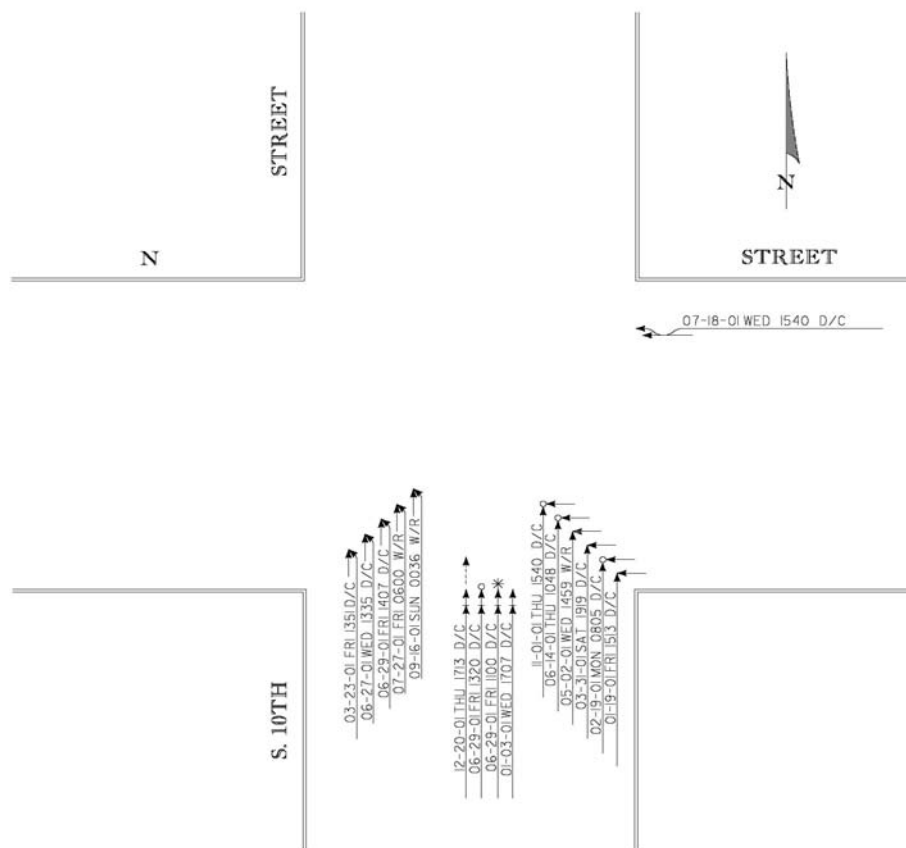
ADT: 31,100 veh/day (2000)

Time Period:

2001

Traffic Control: Pretimed Signal

Crash Pattern: NB Left Turns, Rear Ends and Right Angles



Total Crashes in Before Period: 16



10th Street and N Street - Northbound Approach (Before)

5.8 10th Street and N Street

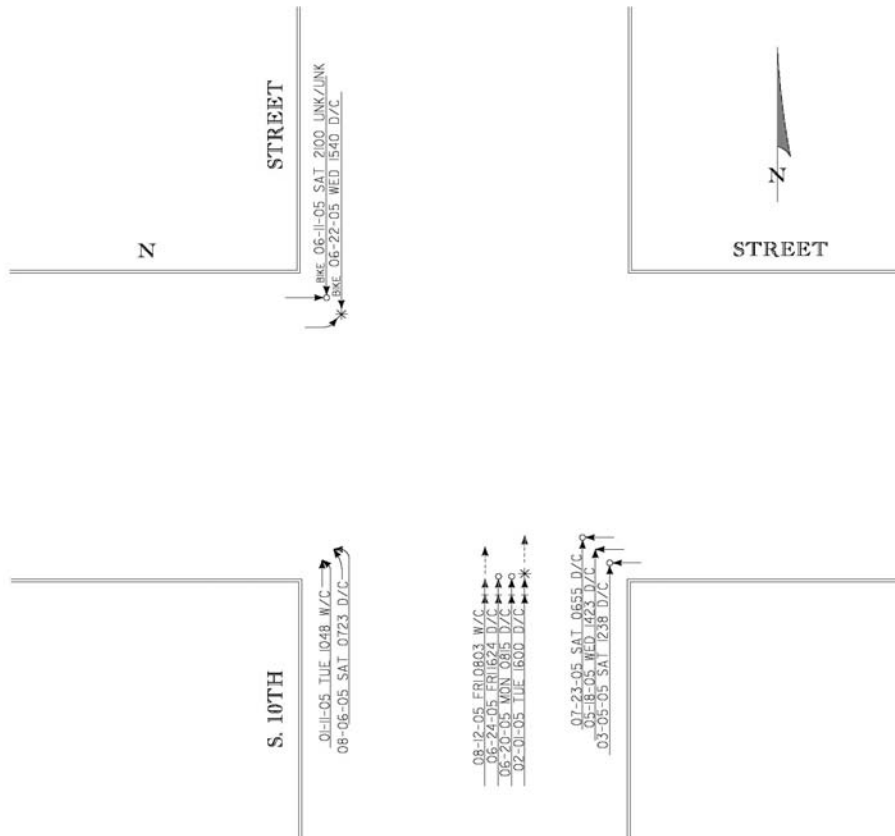
AFTER

Countermeasures: Adjusted Signal Timing & Installed Lane Use Sign

Time Period: 2005

Improvement Completion Date: October 1, 2002

Speed Limits: NB Arterial- 25 mph
WB Collector- 25 mph



Total Crashes in After Period: 11



10th Street and N Street - Northbound Approach (After)

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COMPARISON

Countermeasures:

Adjusted Signal Timing & Installed Lane Use Sign

Improvement Completion Date:

October 1, 2002

	Before	After	Change
Analysis Period	2001	2005	-
Primary Crash Benefit			
Total Number of Correctable Crashes	15	9	-40%
All Other Intersection Crashes	1	2	100%
Intersection Crash Experience			
Injury + Fatal Crashes	4	5	25%
Property Damage-Only Crashes	11	4	-64%
Non-Reportable Crashes	1	2	100%
<i>Total Number of Intersection Crashes</i>	<i>16</i>	<i>11</i>	<i>-31%</i>
Total Intersection Benefit			
Crash Rate	1.41	0.97	-31%
EPDO Rate	4.29	4.87	14%
EPDO Number*	48.67	55.31	6.64

Cost of Property Damage Crash: \$ 6,500
 Total Benefit (12 months): \$ (43,160)
 Equivalent Uniform Annual Benefit (EUAB): \$ (44,368)

Total Cost of Improvements:

Equivalent Uniform Annual Cost (EUAC): \$ 1,165
 Initial Cost: \$ 1,100

Benefit-Cost Ratio:
$$\frac{\$ (44,368)}{\$ 1,165} = -38.1$$

Net Benefit (Present Worth): \$ (44,368) - \$1,165 = (\$45,533)

**Change NOT Statistically Significant at 95% Confidence Interval*

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